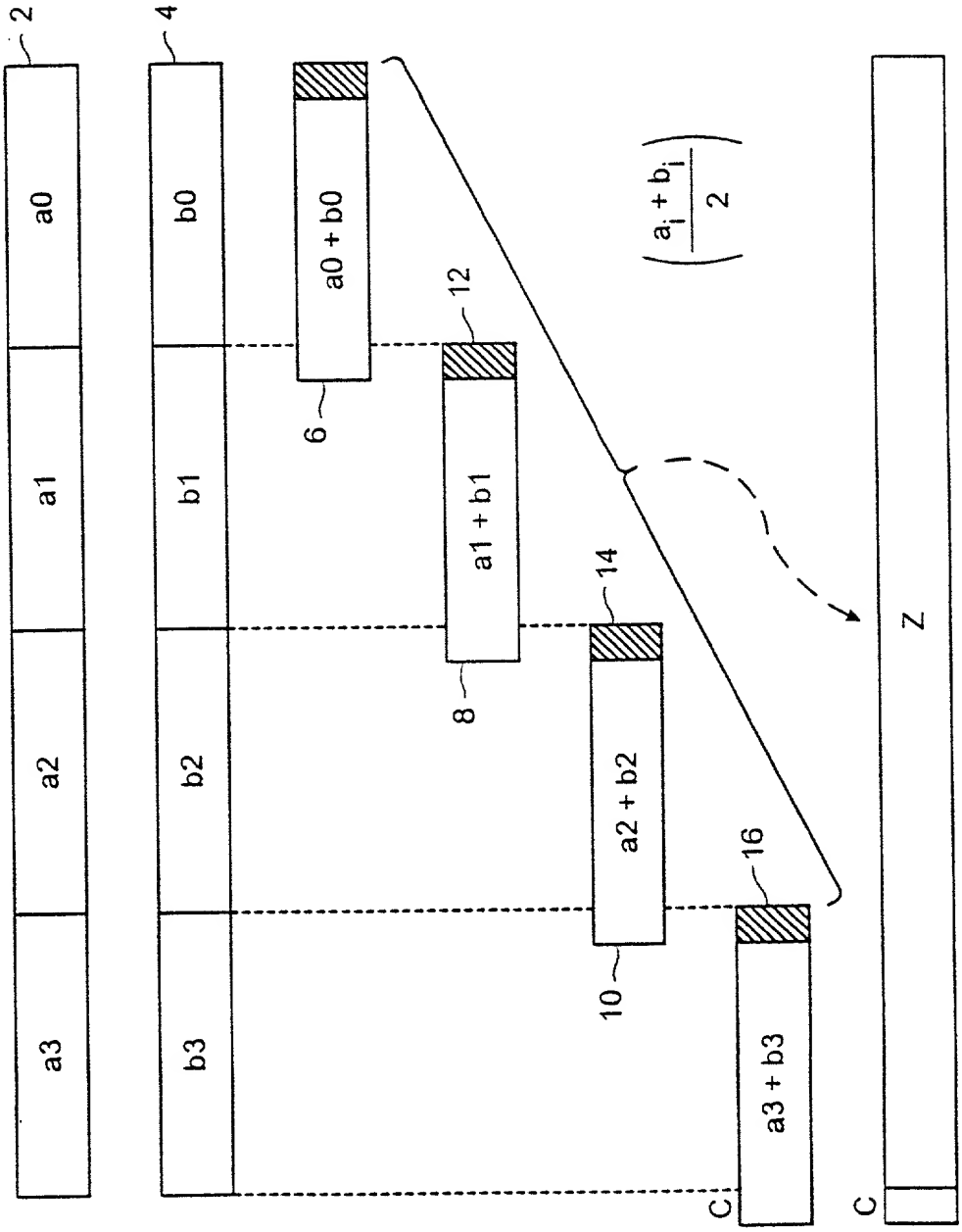
2
4
a0
a1
a2
a3
b0
b1
b2
b3
a0 + b0
a1 + b1
a2 + b2
a3 + b3
6
8
10
12
14
16
C
C
Z
$\left(\frac{a_i + b_i}{2}\right)$

FIG.1

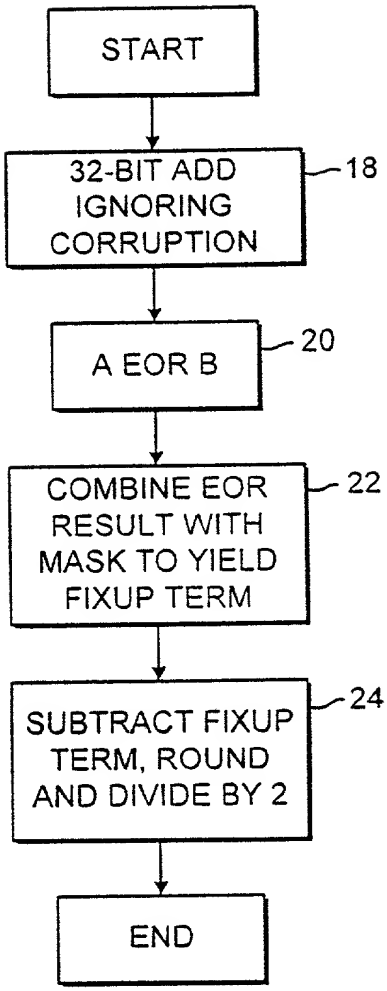
START
32-BIT ADD IGNORING CORRUPTION
18
A EOR B
20
COMBINE EOR RESULT WITH MASK TO YIELD FIXUP TERM
22
SUBTRACT FIXUP TERM, ROUND AND DIVIDE BY 2
24
END

FIG. 2

30 MASK=	0001	0001	0001	001	
26 A=	1101 (13)	0101 (5)	1001 (9)	0001 (1)	
28 B=	0010 (2)	1101 (13)	1111 (15)	1000 (8)	
32 A + B=	10000	0011	1000	1001	
34 (A EOR B) AND MASK=	0001	0000	0000	0001	
36 SUBTRACT & RIGHT SHIFT # 1=	0111 (7)	1001 (9)	1100 (12)	0100 (4)	ROUNDING DOWN
38 ADD & RIGHT SHIFT # 1=	1000 (8)	1001 (9)	1100 (12)	0101 (5)	ROUNDING UP

FIG.3

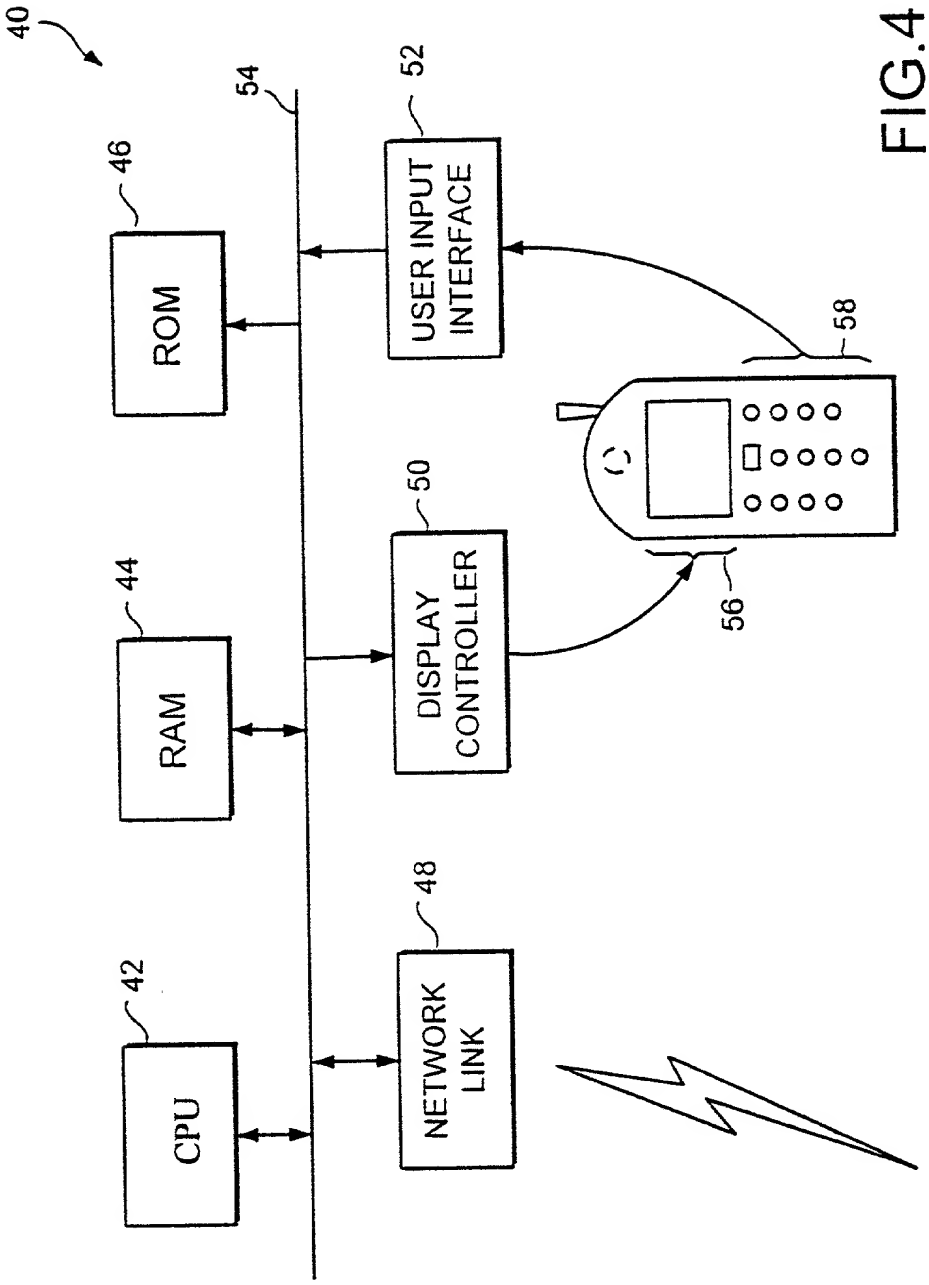
40
54
52
46
ROM
USER INPUT INTERFACE
58
50
44
RAM
DISPLAY CONTROLLER
56
42
CPU
48
NETWORK LINK

FIG.4